



# All Hazards Guide



## Featuring:

Hazards • Understanding Flooding  
Evacuations Levels • Alerting Resources



August, 2018

*Dear Neighbor:*

The hidden treasures of Lewis County draw hundreds of thousands of travelers through its corridors which are surrounded by majestic mountains, lush forests, serene rivers and an idealistic agricultural landscape.

Along with the natural beauty and normally mild weather, there are times that residents have been subjected to flooding of rivers and streams, earthquakes, ice windstorms, volcanic eruptions, and landslides. These incidents have caused power outages, blocked roads, destroyed bridges and isolation of some county areas for weeks.

But they also brought the best responses from our community residents and first responders. Responders have risked their lives performing heroic rescues. Neighbors have helped rescue trapped people and animals, cleared trees from streets, delivered meals to seniors and children, donated goods and services to first responders as well as performed other actions that have helped Lewis County survive and rebuild after a disaster.

As we work on long-term solutions to mitigate flooding, we will continue to plan for a successful response and recovery program. Our community's strength lies in personal and business preparedness made in advance of emergencies.

This Lewis County All Hazards Guide contains information on the risks in Lewis County, alert and notification systems and steps to reduce flooding vulnerability and recovery time. Thank you for joining us in these efforts.

Sincerely,

*Edna J. Fund*

Edna J. Fund, Chair, District 1, Lewis County Board of Commissioners

Robert C. Jackson, District 2, Vice Chair

Gary Stamper, District 3

### **ALERT RESOURCES:**

Want to Get Connected?

Pick from **52 alternative sources** to send you all you want.

You can receive weather alerts by E-mail, text, phone, and mobile devices just by signing up at [www.weather.gov/subscribe](http://www.weather.gov/subscribe)

Cover Photo: 2007 Flood showing the Boistfort Valley. Photo Courtesy:

**The Chronicle**

**Distributed by:**

Lewis County Division of Emergency Management  
351 NW North St., Chehalis, WA 98532 (360) 740-1151



... a Community Notification Program

### What is Lewis County Alert?

Lewis County Alert is a **free** service that allows you to receive notifications about emergencies and other important community information. This system enables us to provide this information in a variety of ways: email, home/business phone, cell, text messages and more. You pick where and how you want to receive messages ... up to 10 different devices.

### What kind of information will I get?

Receive up-to-the-minute Emergency Alerts and follow-up notices on:

- Public safety and health issues
- Water system advisories and concerns
- Emergency road closures and river gage levels
- Sudden storms and flood warnings
- Wildfire notifications
- Evacuation notices and instructions

### Who should Sign-up?

All businesses and individuals who are located, work or live in Lewis County that wish to be notified of emergency and disaster incidents should sign up for this robust alert system. If you have a mobile cell phone, our ability to reach and notify you is extremely effective in getting you critical information that informs you of the threat, what we are doing about it, and what we are asking you to do.

### How to Subscribe

To sign-up, go to the Lewis County website at: [www.lewiscountywa.gov](http://www.lewiscountywa.gov). Scroll down the main page and click the Lewis County Alert symbol (shown above). Required information includes your name, address (must be in Lewis County) city, state and zip code. The system allows multiple cell phones and landline numbers.

**Alerts are FREE**  
**No Solicitors will call!**

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# Emergency Communications Tools

## NOAA Weather Radio

Weather Radios are an important preparedness tool for homes, businesses, government officers and schools.



NOAA Weather Radio broadcasts the latest area weather forecasts on the public service band. These frequencies are not found on a typical home radio. Weather radios can be purchased at local electronics supply stores, starting at about \$30 for special radio receivers capable of picking up the signal.

### Look for these features:

Weather radios are available both with and without a warning alarm feature. They can be programmed to alarm only the warning messages you want. It is strongly recommended citizens have a radio with Emergency Alert System (EAS) capability (also known as SAME – Specific Area Message Encoder).

## Emergency Communications – RACES/ARES Ham Radio

In the event primary communications systems are out-of-service during an incident, two volunteer amateur radio operator groups throughout the Lewis County area are called to service. Radio Amateur Civil Emergency Service (RACES) members provide reserve communications within government and Amateur Radio Emergency Services (ARES) provide support to non-government agencies. In Lewis County, an extensive network of Ham Radios connects all the Fire Districts, Command Vehicles, EOCs, hospitals, service organizations, and even some of the remote communities.



Lewis County **SAME** Code: **053041**

**Frequency: 162.475** for most of Lewis County

**Morton and Beyond** (Upper Cowlitz Valley) also try **162.425**

### **If you are in the Floodplain . . . . Buy Flood Insurance!**

Protect your family and your home . . . . Can you pay off your current mortgage and have a fresh start without insurance?

Remember, FEMA programs only provide a minimal assistance. Typical Washington claimants over the past 20 years have averaged less than \$3,000 per claim – if your home is a complete loss the maximum payout is less than \$30,000.

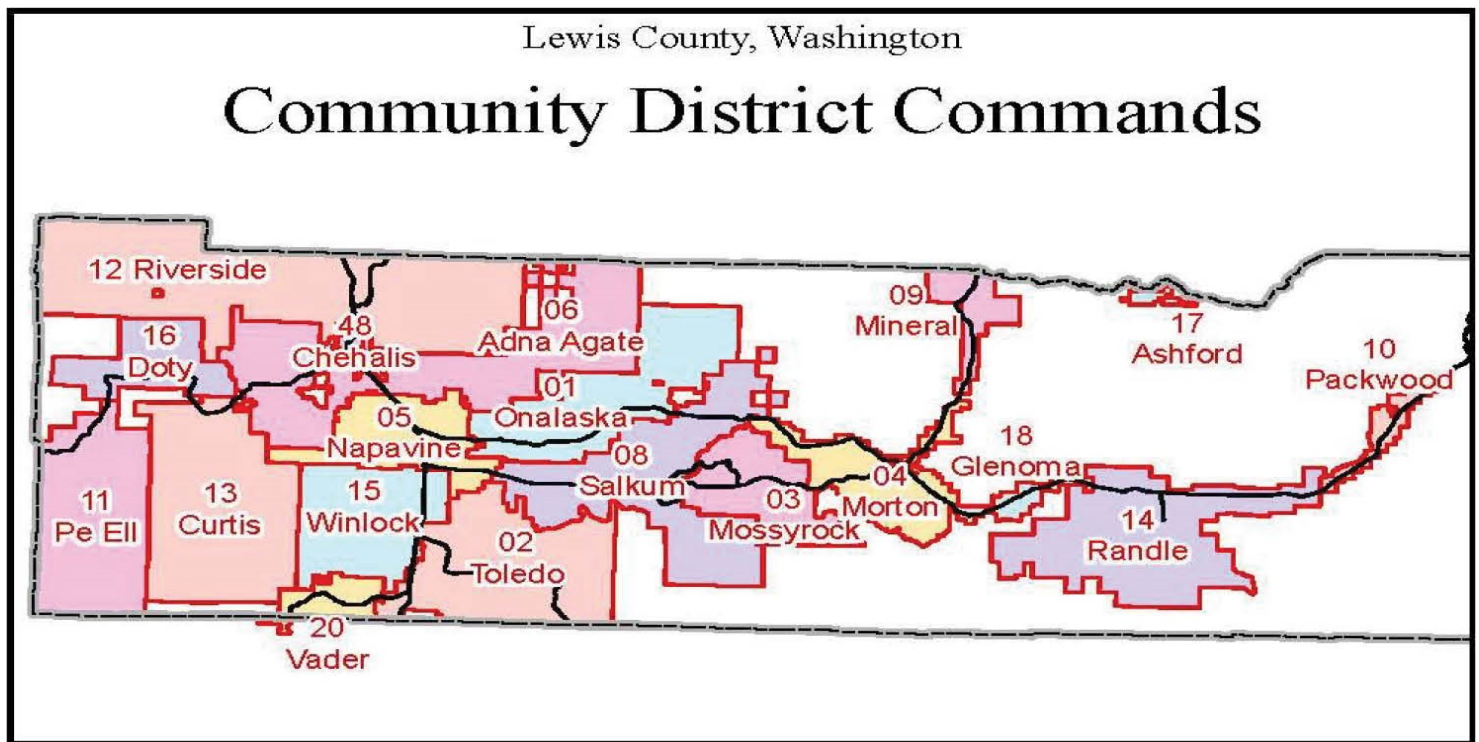


# Community District Commands

Neither natural nor man-made events follow city-county boundary lines. Lewis County uses a “Community District Command” system during catastrophic incidents when normal communications and transportation routes are down. The pre-incident, geographically defined areas are based upon the current fire district boundaries.

CDCs have back-up ham radio capabilities and will be used for continuity of operations and consolidations of resources in the response and recovery efforts.

This system was effectively utilized to track needs and deploy resources in the 2007 flood response and recovery operations.



### Preparedness Tips:

Become familiar with the location of your local fire station.

### Want to become more involved?

#### Lead your neighborhood into preparedness.

Emergency Management has a program called **“Map Your Neighborhood.”** Become a team leader and conduct meetings (**free** self-directed materials will be provided) with your neighbors to build and strengthen disaster readiness. Immediately following a disaster, follow the 9 steps of the program. Call Emergency Management at (360) 740-1151 for more information.



## KNOW YOUR RISKS

Rural communities, such as Lewis County, are vulnerable to any number of hazardous or threatening situations. These can include incidents caused by natural disasters, biological emergencies or man-made (technological) threats. The term "all-hazards" is used to describe these possible situations that can impact you, your family your home or farm, your business or your community.

The impact of any disaster or hazard on rural communities not only affects human life and property, but can also cause devastating damage to the agricultural commodities - livestock, crops, and businesses - associated with these areas. Additionally, emergency or response resources may be limited. In the event of a disaster or emergency situation, individuals, businesses or communities may need to be self-sufficient for several weeks until further assistance from local, state or federal agencies can be obtained.

Preparing for "all-hazards" requires knowing your risks and developing emergency plans to use during and after the situation. These efforts will help to minimize the impact and to protect yourself, your family, your home or farm and business, as well as your pets and livestock.

### **Lewis County Disaster Event History 1970 – 2017 (35 of 66 Flood Caused)**

<b>Years: 1970 - 1999</b>	<b>Presidential Declarations</b>	<b>Local Declarations</b>	<b>Preliminary Damage Estimates</b>
<b>1970-1979</b>	5		5,305,994
<b>1980-1989</b>	2		3,926,250
<b>1990-1999</b>	9	14	21,842,633
<b>30 Year Total: (1970-1999)</b>	<b>16</b>	<b>14</b>	<b>\$ 31,074,877</b>

<b>Years 2000 - 2017</b>	<b>Presidential Declarations</b>	<b>Local Declarations</b>	<b>Preliminary Damage Estimates</b>
<b>2000-2009</b>	6	2	230,016,729
<b>2010-2017</b>	9	14	9,692,253
<b>17 year total: (2000-2017)</b>	<b>15</b>	<b>16</b>	<b>\$ 239,708,982</b>



Table 1 and Table 2 show some of the hazards that have a potential to affect large areas or populations within Lewis County and when they are most likely to occur:

<b>Table 1. HAZARD RISK RATING</b> (Probability, Vulnerability and Risk)			
<b>Natural Hazards:</b>	<b>Probability of Occurrence</b>	<b>Vulnerability</b>	<b>Risk Rating</b>
<b>Avalanche</b>	Low	Low	<b>Low</b>
<b>Drought</b>	Medium	Low	<b>Medium</b>
<b>Earthquakes</b>	Low	High	<b>High</b>
<b>Fire-Urban/Wildland Interface</b>	Medium	Low	<b>Medium</b>
<b>Flood</b>	High	High	<b>High</b>
<b>Severe Storms</b>	High	Medium	<b>High</b>
<b>Mass Land Movement</b>	Medium	Low	<b>Medium</b>
<b>Volcano</b>	Low	High	<b>Medium</b>
<b>Technological Hazards:</b>			
<b>Civil Disturbance</b>	Low	Low	<b>Low</b>
<b>Dam and Reservoir Failure</b>	Low	High	<b>Medium</b>
<b>Epidemic</b>	Low	High	<b>Medium</b>
<b>Pipeline</b>	High	Medium	<b>Medium</b>
<b>Hazardous Materials</b>	High	High	<b>High</b>
<b>Terrorism</b>	Low	Low	<b>Low</b>
<b>Transportation</b>	High	Medium	<b>Medium</b>

<b>Table 2. HAZARD RISK CALENDAR</b>												
	January	February	March	April	May	June	July	August	September	October	November	December
<b>Natural Hazards</b>												
<b>Avalanche</b>	←	→									←	→
<b>Drought</b>					←	→				→		
<b>Earthquakes</b>	←	→										→
<b>Fires/Wildland interface</b>					←	→				→		
<b>Flood</b>	←	→								←	→	
<b>Severe Storms</b>	←	→								←	→	
<b>Mass Land Movement</b>	←	→									←	→
<b>Volcano</b>	←	→										→

*Additional information regarding each risk element, frequency of occurrence, historical data, and preliminary damages estimates can be obtained in the Lewis County Hazard Identification and Vulnerability Analysis (HIVA), 2018.*



# Understanding the Lewis County Flooding Challenges



Floods are one of the most common and costly natural disasters. Since 1990, Lewis County has experienced 16 Presidentially Declared Disasters; 12 (71%) of those were caused by flooding. Preparing now for flood situations can minimize injury to you and your family and speed the recovery process.

The 2006 East Lewis County flood (record levels) caused \$26.6 million in public/private damages and two deaths. The West Lewis County record flood in 2007 documented preliminary damages exceeding \$166 million to over 3,000 homes and businesses. These events translate to years of financial losses to businesses, transportation systems, tax revenues and public/private property structures.

## **The Rivers:**

There are five major river systems that contribute to flooding conditions in Lewis County. The Cowlitz and Nisqually Rivers in Eastern Lewis County and the Chehalis, Newaukum and Skookumchuck in Western Lewis County. China Creek also has had a dramatic impact in the Centralia area. Generally, widespread flooding in Lewis County occurs when there is just too much water in too short a time for the streams and river banks to hold and absorb it. Man-made changes to a basin also can affect the size of floods.

The magnitude of flooding depends on intensity and duration. Combinations of several factors add to that including: rainfall amount, pre-existing river and existing soil conditions (was the ground wet or frozen before the storm) size of the area, elevations of a basin and sometimes the amount of snowpack.

## **When is Flooding Likely? November – March**

Floods can happen at any time during the year, but Lewis County's patterns begin in late November and end about the last of March. Fall and early winter floods are produced by heavy rainfall on wet or frozen ground. Winter and early spring floods typically are caused by rainfall and a melting snowpack. As we convert more forest land to lawns, lots and impervious surfaces, more "urban" flooding (ponding in the fields and alongside roadways) is increased. Retention capacity decreases and runoff increases.

## **Live Next to the River or in the Floodplain? Stay Alert During Flood Season**

**No two flood events are the same.** A flood stage prediction on one river does not always mean there will be widespread flooding in that area. Just because it has never flooded at a particular area, doesn't mean it never will flood there. Also, even if it has flooded at a location in the past 3 floods, doesn't mean it will flood there in the next flood!

However, with river readings from several gages and the historical documentation from past flooding events, we can produce some very accurate short term projections for flooding events. The river reading links on the next page are provided to help you stay up-to-date and informed on the major river systems, their current conditions and flood stages that may affect your area.



# Website Access to Lewis County River Gages



## River Gage Readings

Lewis County's website: [www.lewiscountywa.gov](http://www.lewiscountywa.gov) (scroll down to the bottom right hand corner) "River Readings" provides citizens with up-to-date information on the current status of 8 primary rivers and 9 tributaries. You can also sign up to receive notifications.

This information is also displayed at the USGS site:

<http://waterdata.usgs.gov/wa/nwis/rt>. Then click "Statewide Streamflow Table."



Want **Chehalis Basin-wide** Information?  
(Lewis-Thurston-Grays Harbor)  
Visit: [www.chehalisriverflood.com](http://www.chehalisriverflood.com)

## Flood Watch vs. Warning

When a "Watch" is issued, prepare for the possibility of a flood. A "Warning" means a flood is about to occur or is already occurring. When a "Warning" is issued, stay tuned to a local radio station for further information and be prepared to take quick action if needed.



 KELA 1470 AM / KMNT 104.3 FM • KCED 90.1 • KACS 90.5 FM  
KITI 1420 AM / LIVE95 95.1 FM • KNBQ 102.9 FM

## Tips for People with Special Needs

It is even more important for people with special needs to do pre-planning. Have a plan already in writing. Enlist the help of your personal support network or care givers. If vulnerable, you might need to implement your plans early so that others are available to assist.

- Have a written list of all your medications, name, dose, frequency name of the prescribing doctor and pharmacy.
- Keep a bag packed at all times that contains a three day supply of medications, vital papers, insurance cards, identification.
- Make a plan for where you are going, transportation to get there, and a written list of all the contact people's phone numbers.
- Know who can walk to your home to assist you if no other means of transportation is available.



# FLOODS AND YOUR BUSINESS

The impact of all-hazard situations on your business can involve your property, employees, customers and suppliers. A community cannot recover until its businesses are back and citizens can return to their jobs. Planning ahead can help to minimize the impact and speed the recovery of your business.

## Before a Flood

- **Sign up to receive Lewis County Alert notices.**  
**Purchase and install a NOAA Weather Radio**
- Determine the risk of flooding for your area.  
Determine the processes and equipment needed to keep the business open, from answering the phones to tracking finances. Make a plan for a temporary location if necessary. Have a plan for alternate communications. Determine leadership roles and responsibilities. Periodically review the plan with employees.
- Have a business emergency/continuity plan.
- Consider buying flood insurance/business interruption insurance
- Plan for continuity.
- Prepare your property.
- Prepare your employees.
- Develop a post-disaster communications strategy.
- Make plans regarding customers.
- Make plans for suppliers.

## During a Flood

- Stay informed  
Listen to radio or television for situation developments and evacuation instructions. Plan for two (2) evaluation routes. Close and send employees home before “rescues” become necessary.
- If evacuation appears necessary, ensure employee and customer safety.

## After a Flood

- Return to your business only after officials declare the area safe.
- Wear protective clothing (rubber gloves, boots)
- Before entering – assess the situation.
- Survey the outside and inside for contaminated water, structural damage, sharp objects, downed power lines, damaged gas lines and hazardous chemicals.
- Approach entrances carefully, parts of the building may be damaged.

# FLOODS AND YOUR FAMILY

Floods are the most common, and most costly, natural disasters affecting Lewis County. Preparing now can minimize injury to yourself and your family and speed the recovery process.

## Before a Flood

- **Sign up to receive Lewis County Alert notices.**  
**Purchase and install a NOAA Weather Radio.**
- Be prepared for the possible disruption of services for extended periods of time, including electric, phone and local food and water sources.
- Prepare an emergency kit for every member of the family.  
Food/water/medications for at least 14 days. Flashlights, batteries. Tools. First aid, extra clothing, important family documents, and water purifying supplies.
- Develop a family communications and evacuation plan with two escape routes. Have a plan for pets.

## During a Flood

- Gather your emergency supplies and be ready to leave immediately.
- Stay informed.  
Listen to radio or television for situation developments and evacuation instructions. Plan for two (2) evaluation routes and know when you need to leave to avoid having to be rescued.
- If there is time, disconnect electrical appliances.
- Follow evacuation notices and routes; expect heavy traffic.

**Avoid Floodwaters** – Water may be contaminated by oil gasoline, raw sewage.

**Do not walk through moving water** – 6 inches of water can sweep you off your feet.

**Do not drive in flooded areas** – Most flood deaths occur in vehicles. One foot of water will float most vehicles; 2 feet can carry most vehicles away.

**If flood waters rise around your car**, abandon the car and move to higher ground.

## After a Flood

- Return to your home only after officials declare the area safe.
- Clean up safely – wear protective clothing (rubber gloves, boots).
- Before entering – assess the situation; parts of the building may be damaged.
- Use safe water – wells may be contaminated. Boil or treat water until authorities tell you the water supply is safe.
- Prevent illness – wash hands frequently.
- Food Safety – when it doubt, throw it out!  
Throw away any food that comes in contact with flood water.  
Throw away perishable foods that have been unrefrigerated for 2 or more hours.



# FLOODS AND YOUR HOME

Protecting your home during flood situations can involve a variety of actions, from inspecting and maintaining the property to installing protective devices or materials.

## Before a Flood

- Determine the flood risk in your area.
- Identify potential hazards on your property.
- Place furnace, water heater, washer, dryer on cement blocks above flood elevation.
- Strap down water heater.
- Protect your home.
- Safeguard your possessions.
- Create a room-by-room inventory, include photos and receipts.
- Gather copies of critical documents and place in a secure place (safe deposit box).
- Obtain flood Insurance.

Don't rely on FEMA to cover your losses. An average for Washington State FEMA claims for the past 20 years is \$3,000 per family; maximum if the home is a total loss is about \$28,000. If you can't cover the rest, **Get Flood Insurance!**

## During a Flood

- Stay informed.
- Listen to radio or television for situation developments and evacuation instructions. Plan for two (2) evaluation routes.
- If you must evacuate, do so before it becomes a "rescue" situation.
- Ensure your family's safety first. Don't leave pets behind.
- Gather your emergency supply kit; take only essential items with you.
- Shut off electrical power and propane tanks to avoid fire or explosions.

## After a Flood

- Return to your home only after officials declare the area safe.
- Before entering – assess the situation.
- Check for building damage, sharp objects, downed power lines, smell of gas or hissing noise.
- If power lines are down, do not step in any standing water.
- Approach entrances carefully.
- Check to see if porch roofs and overhangs have all their supports.
- Account for your inventory.
- **TAKE PHOTOGRAPHS!!** (for insurance, FEMA) before cleaning or repairing anything.
- Contact your insurance company or Emergency Management to file your claim.

# FLOODS AND YOUR HOME - CLEANING

Quickly removing contaminated materials and drying out your home is critical to preventing health hazards from mold growth. Even a few inches of water can create an unhealthy environment. When in doubt, take it out!

- **Clean and disinfect items.**
- If there has been a backflow of sewage into the house, wear rubber boots and waterproof gloves during cleanup.
- All hard-surface floors, and many other household surfaces should be cleaned with soap and water and disinfected with a solution of 1 cup of bleach to 5 gallons of water.
- Thoroughly disinfect counter tops, pantry shelves, refrigerators that come into contact with food.
- Carefully clean areas where children play.
- Wash all linens and clothing in hot water or dry clean.
- Remove and discard contaminated household materials that cannot be disinfected, such as wallcoverings, cloth, rugs, and drywall.
- **Prevent carbon monoxide poisoning.**
- Never run a gas-powered generator or pressure washer inside, even if the doors or windows are open.
- Avoid running gas-powered equipment near open windows, doors, or vents where exhaust can enter indoor enclosed areas.
- **Clean up safely.**
- If the house has been closed up for several days, enter briefly to open doors and windows to let the house air out for awhile (at least 30 minutes) before you stay for any length of time.
- Presume your home has been contaminated with mold.
- Use fans and dehumidifiers to remove excess moisture. Fans should be placed so air blows outwards rather than inwards.
- Have your home heating, ventilating, and air-conditioning (HVAC) system checked and cleaned by a professional who is experienced in mold clean-up before you turn it on.
- **Prevent mold growth.**
- Remove any items that have been wet for more than 48 hours, which cannot be thoroughly cleaned and dried.
- Porous items (carpeting, carpet padding, upholstery, wallpaper, drywall, floor and ceiling tiles, insulation, some clothing, leather, paper, wood and food can remain a source of mold growth and should be removed.
- **Well and Pump inspection.**
- There is a danger of electrical shock from any electrical device that has been flooded.
- Flood water could have also entered the well and contaminated it.
- Well water should be sampled and tested for contamination prior to use for drinking, cooking, or cleaning.
- **Septic Systems.**
- Septic system should not be used immediately after floods; drain fields will not work until water in the soil absorption field is lower than the water level around the house.



# FLOODS AND YOUR PETS

Floods can impact animal health as well as human health. Make plans for your pets in the event you will need to evacuate your home or farm

## Before a Flood

- Create an emergency supply kit for your pet.
  - Transport carrier
  - Food and water for 7-14 days.
  - Vaccination history, rabies certificate, vet contact information
  - Waste Disposal supplies
  - Blanket, toys, treats
- Identification.
  - All pets should have identification (collar with tag, microchip).
  - Take a photo of the pet and you. Put a copy with medical records and the carrier (in a water tight bag).
  - Include proof of ownership (registration, adoption records, microchip info.).
- Develop an evacuation plan for your pets.
  - Shelters may not be able to accept pets. Identify pet friendly locations in case you need to evacuate.
  - Check with boarding facilities, veterinary clinics or relatives outside the impact area.

## During a Flood

- Bring your pets inside immediately
- **AVOID leaving pets behind.** If it isn't safe for you, it isn't safe for your pets.
- If there is no alternative, leave them loose inside your home with food and plenty of water.
- Never leave your pet chained outside or enclosed in a way they cannot escape danger.
- Place a notice on the outside of your home with the location and type of pets inside, their names, your contact phone number and the vet's name/ number.

## After a Flood

- Your pet's behavior may change before, during and even after a disaster.
- Familiar scents and landmarks may be altered and your pet can become confused and lost.
- For the first few days after the disaster, leash your pet when they go outside. Always maintain close contact.
- Reintroduce food in small servings, increasing over time, especially if animals have been without food for a prolonged period of time.
- Pets can be poisoned by exposure to harmful chemicals.

# FLOODS AND YOUR FARM

Protecting your farm during flood situations can involve a variety of actions, from inspecting and maintaining the property to installing protective devices or materials.

## Before a Flood

- Determine the flood risk for your area.
- Prepare a relocation (or evacuation) plan for livestock. Include triggers for when to take action.
- Identify potential hazards on your property.
- Identify areas of higher ground to relocate livestock, valuables or hazardous materials.
- Prepare buildings.  
Raise electrical components above the projected flood elevation.
- Make an inventory list of your farm, include:  
Livestock.  
Crops (acres, type)  
Machinery and equipment.  
Hazardous substances (pesticides, fertilizers, fuels, chemicals)
- Obtain flood insurance

## During a Flood

- Stay informed  
Listen to radio or television for situation developments and evacuation instructions. Plan for two (2) evaluation routes. Be prepared to move livestock to high ground or relocate them before the water goes over roadways in your evacuation routes.
- If you must evacuate, do so before it becomes a “rescue” situation.
- Leave building doors and windows open at least 2 inches to equalize pressure and help prevent buildings from shifting.
- If time allows, move motors and portable equipment to a dry location.

## After a Flood

- Stay safe during cleanup.  
Wear protective clothing, including rubber gloves and rubber boots.
- Before entering – assess the situation.  
Check for contamination, structure damage, downed power lines, gas smell.
- Account for your inventory.  
Check your list from before the incident (livestock, machinery, equipment, crops).  
Take photographs of all damages for insurance or emergency assistance programs.
- Flooded farm machinery.  
Recondition equipment before use. Thoroughly clean, dry and lubricate parts.



# FLOODS AND YOUR LIVESTOCK

Due to size, transport issues and special sheltering needs having an emergency evacuation plan for your farm is imperative. Be aware, animal behavior may change before, during and even after a disaster.

## Before a Flood

- **Determine the hazards and risks for your area and animals.**  
Are animals located outside or housed indoors?
- **Maintain an inventory with record of permanent identification on animals (ear tags, tattoos).**
- **Identify alternate water or power sources.**
- **Prepare an evacuation kit.**  
Handling equipment (halters, nose leads)  
Water, feed and buckets  
Tools and supplies for manure cleanup  
Gas powered generators
- **Make an evacuation plan.**  
Determine possible evacuation areas – higher ground, temporary milking parlor.  
Determine at least 2 escape routes to safe locations (higher ground) and identify triggers for when to leave.  
Make transport arrangements with haulers and drivers.  
Know what organizations are prepared to rescue and house livestock.  
Make mutual plans with neighbors to help one another, when needed.  
Condition animals to being loaded and transported.  
Remove anything that might become debris (an additional hazard) during a flood.

## During a Flood

- If you must evacuate, ensure your family's safety first.
- If there is time, move or evacuate livestock and horses to higher ground.  
**Avoid leaving animals behind.**
- Do not rely on automatic watering systems because power may be lost.
- If there is no other alternative, keep gates or buildings open so they can escape high water.
- Provide access to safe free-choice food source, clean water and the safest living areas possible.

## After a Flood

- Assess structures for signs of safety and contamination issues.
- Return animals only when it is safe to do so.
- Provide non-contaminated feed or water.
- Check with the Lewis County Health Department for proper animal disposal methods for carcasses.
- Monitor animals daily for signs of illness.

# LIVESTOCK DAILY FEED AND WATER REQUIREMENTS

ANIMALS	WATER / DAY	FEED / DAY
<b>DAIRY COWS</b>		
In Production	9 Gallons Summer	20 Pounds Hay
	7 Gallons Winter	
Dry Cows	9 Gallons Summer	20 Pounds Hay
	7 Gallons Winter	
Weaning Cows	6 Gallons Summer	8-12 Pounds Hay
	3 Gallons Winter	
Pregnant	7 Gallons Summer	10-15 Pounds Legume Hay
	6 Gallons Winter	
Cow with Calf	9 Gallons Summer	12-18 Pounds Legume Hay
	8 Gallons Winter	
Calf (400 Pounds)	6 Gallons Summer	8-12 Pounds Legume Hay
	4 Gallons Winter	
<b>SWINE</b>		
Brood Sow with Litter	4 Gallons Summer	8 Pounds Grain
	3 Gallons Winter	
Brood Sow (Pregnant)	1-2 Gallons Summer	2 Pounds Grain
	1 Gallon Winter	
150 Pound Gilt or Boar	1 Gallon	3 Pounds Grain
<b>SHEEP</b>		
Ewe with Lamb	1 Gallon	5 Pounds Hay
Ewe, Dry	3 Quarts	3 Pounds Hay
Weaning Lamb	2 Quarts	3 Pounds Hay
<b>POULTRY</b>		
Layers	5 Gallons / 100 Birds	17 Pounds / 100 Birds
Broilers	5 Gallons / 100 Birds	10 Pounds / 100 Birds
Turkeys	12 Gallons / 100 Birds	40 Pounds / 100 Birds
<b>HORSES</b>		
All Breeds	5 Gallons / 1000 Pounds	20 Pounds Hay / 1000 Pounds





## GOT A PLAN?

Earthquakes, floods, windstorms, and other disasters can strike with little or no warning. That's why we have to be prepared today for what might happen tomorrow.

During emergencies, local phone service is quickly overwhelmed with thousands of calls. Limit phone calls so emergency calls can get through. Have an out-of-area contact that family members can check in with.

Pre-identify two meeting locations for family; one near home and one away from the neighborhood in case returning to your home is impossible.

### How Prepared is Your Family for An Evacuation?

Conduct the following exercise with family members to set your evacuation priorities and establish a list of items to take. (Also, each member should have a “Grab n’ Go” backpack for their personal items.)

#### 30 Minute Exercise

Step 1 – Gather all members of the family.

Step 2 – Ask this question of each family member:

“If you were given a 30-minutes notice to evacuate,  
what would be most important for you to take?”

Step 3 – Make a list of the items each member suggests should be taken.

Step 4 – Review the list, make priorities and assign family members to gather the items.

Step 5 – Post the “Evacuation List” on the refrigerator or Family Message Center so it is ready when needed.

#### EVACUATION LEVELS – ALL HAZARDS

Level 1 – **READY** – Danger exists in the area.

Level 2 – **SET** – Significant danger exists.

Relocate or be ready at a moment's notice.

Level 3 – **GO** – Leave Immediately!



# IMPORTANT CONTACT NUMBERS & WEBSITES

**Dial 9-1-1 for life threatening emergencies ONLY!**

To report a crime use the business line (360) 740-1105) – County & all cities

Business lines for all other services:

**Lewis County Sheriff:** (360) 748-9286      **City of Chehalis** (360) 748-8605

## Utilities:

Centralia City Light: (360) 330-7512

    Trouble calls after 3:30, plus Sat-Sun-Holiday: (360) 736-7040

Lewis County PUD # 1: (360) 748-9261

Lewis County PUD - Morton: (360) 496-6100

PacificCorp Energy: (360) 748-1300

Puget Sound Energy (both gas and electric service): (425) 452-1234

## Lewis County Resources and Departments:

Lewis County Community Development: (360) 740-1146

Building Official: (360) 740-2696

Lewis County Division of Emergency Management: (360) 740-1151

Lewis County Public Health & Social Services: (360) 740-1223

    Solid & Hazardous Waste, Code Compliance: (360) 740-2718

    Water Program: (360) 740-1237 or 740-2691

Lewis County Road Maintenance: (360) 740-1122

Lewis County Solid Waste and Hazo Hut: (360) 740-1221 or 740-1481

## Websites:

Lewis County: [www.lewiscountywa.gov](http://www.lewiscountywa.gov)

    River Readings: scroll down page and select “River Readings”  
                            lower right corner

    Road Conditions: scroll own page and select “Road Conditions”  
                            third row, center

Lewis County Division of Emergency Management: [www.lewiscountywa.gov/em](http://www.lewiscountywa.gov/em)

Chehalis River Basin Flood Authority:

[www.chehalisriverflood.com](http://www.chehalisriverflood.com); [scottb@sbgh-partners.com](mailto:scottb@sbgh-partners.com)

National Flood Insurance Program & Maps:

[www.fema.gov/national-flood-insurance-program](http://www.fema.gov/national-flood-insurance-program): 1-800-611-6122



# Emergency Management Director Message

## Why prepare?

Simply put, we should plan and prepare because we care. Because other people depend upon us. Because being responsible is about being self-sufficient, independent and prepared for the risks we face. The responsibility for protecting ourselves and our families falls first upon us. Being prepared will make a positive difference for you, your business, and your family when the next disaster does strike.



Incidents occurring in the past 10 years have proven that we need to be prepared to be on our own for at least **14 days**. We cannot count on emergency responders to reach us quickly. What will you do if help is a long time coming?

Being prepared and understanding what to do can reduce fear, anxiety and losses that accompany disasters and may make all the difference when seconds count. This All Hazards Guide can help!

The *Lewis County All Hazards Guide* outlines natural and man-made vulnerabilities and applies a risk rating to them. Various communications methods and alert notification methods are lists for your consideration. It also contains flood information; divided as actions “Before, During and After” a disaster. Additional information can be obtained online at [www.ready.gov](http://www.ready.gov).

Personal responsibility is key to a successful response to disastrous events, and we encourage every resident and visitor to make a plan to be prepared for lessen the impacts from the risks we face. Knowing your hazards, vulnerabilities and risks are

the first steps in developing your plan and protecting your family and loved ones. Remember, “failure to plan, is a plan to fail.”



*Steve Mansfield*

Director

Lewis County  
Emergency Management